

In the Claims:

Please amend the claims as follows:

1. (Original) A wavelength-converting casting composition, comprising:  
a transparent casting resin:  
an inorganic luminous substance pigment powder dispersed in said transparent casting resin, said pigment powder comprising luminous substance pigments selected from the group consisting of garnets doped with rare earths; thiogallates doped with rare earths; aluminates doped with rare earths; and orthosilicates doped with rare earths; and  
said luminous substance pigments having grain sizes  $\leq 20 \mu\text{m}$  and a mean grain diameter  $d_{50} \leq 5 \mu\text{m}$ .
2. (Original) The casting composition according to claim 1, wherein said luminous substance pigments are substantially spherical particles.
3. (Original) The casting composition according to claim 1, wherein said luminous substance pigments are flakelike particles.
4. (Original) The casting composition according to claim 1, wherein the mean grain diameter  $d_{50}$  of said luminous substance pigments is between one and two micrometers.
5. (Original) The casting composition according to claim 1, which comprises the following components:
  - a)epoxy casting resin  $\geq 60 \%$  by weight;
  - b)luminous substance pigments  $> 0$  and  $\leq 25 \%$  by weight;
  - c)thixotropic agent  $> 0$  and  $\leq 10 \%$  by weight;
  - d)mineral diffusor  $> 0$  and  $\leq 10 \%$  by weight;
  - e)processing adjuvant  $> 0$  and  $\leq 3 \%$  by weight;
  - f)hydrophobic agent  $> 0$  and  $\leq 3 \%$  by weight; and

g)adhesion promoters > 0 and  $\leq$  2 % by weight.

6. (Original) The casting composition according to claim 1, wherein said luminous substance pigments are Ce-doped garnets.
7. (Original) The casting composition according to claim 1, wherein said luminous substance pigments are YAG: Ce based particles.
8. (Original) The casting composition according to claim 1, comprises a content of iron  $\leq$  20 ppm.
9. (Currently amended) The casting composition according to claim 1, wherein said luminous pigments are formed with a ~~silieon~~ silicone coating.
10. (Currently amended) The casting composition according to claim 1, wherein said luminous substance pigment powder ~~and said casting resin are adjusted to convert converts~~ a wavelength of ultraviolet, blue, or green light into a relatively longer wavelength.
11. (Original) The casting composition according to claim 1, wherein said luminous substance pigments are formed of a material from a phosphorus group having the general formula  $A_3B_5X_{12}:M$ , where A is at least one element selected from the group consisting of Y, Gd, Lu, Sc, and La: B is at least one element selected from the group consisting of Al and Ga; X is O; M is at least one element selected from the group consisting of Ce, Eu, Cr, Nd, Er, and Tb.
12. (Original) The casting composition according to claim 1, which comprises light-scattering particles added to said casting resin.

13. (Original) A light emitting semiconductor component, comprising:  
a semiconductor body formed of a semiconductor layer sequence and being capable, during an operation of the semiconductor component, of emitting electromagnetic radiation in a first spectral range selected from ultraviolet, blue, and green;  
wavelength-converting casting composition disposed in a vicinity of said semiconductor body and formed of a transparent casting resin in an inorganic luminous substance pigment powder dispersed in said transparent casting resin; said pigment powder comprising luminous substance pigments selected from the group consisting of garnets doped with rare earths; thiogallates doped with rare earths; aluminaes doped with rare earths; and orthosilicates doped with rare earths; and  
said luminous substance pigments having grain sizes < 20  $\mu\text{m}$  and a mean grain diameter  $d_{50} \leq 5 \mu\text{m}$  and converting a portion of the radiation originating from said semiconductor component into radiation of a higher wavelength, such that the semiconductor component emits mixed radiation including the higher-wavelength radiation and radiation from the first spectral range.
14. (Original) The light-emitting semiconductor component according to claim 13, wherein said casting composition encloses at least a part of said semiconductor body.
15. (Original) The light-emitting semiconductor component according to 13, wherein said semiconductor body is adapted to emit radiation in a blue spectral range having a maximum luminescence intensity at  $\lambda = 430 \text{ nm}$  or at  $\lambda = 450 \text{ nm}$ .
16. (Original) The light-emitting semiconductor component according to claim 13, which further comprises an opaque base housing having a recess formed therein, said semiconductor body being disposed in said recess and said recess being-at least partially filled with said casting composition.

17. (Currently amended) The light-emitting semiconductor component according to claim 13, wherein said pigment powder casting composition is provided with various kinds of comprises of at least two luminous substance pigments in respect to a host lattice distribution and a type and extent of doping, where at least one is selected from the luminous substance group of claim 13.
18. (Original) The light-emitting semiconductor component according to claim 13, wherein said semiconductor body is a blue light emitting semiconductor body, and said luminous substance pigments are Ce-doped phosphors adapted to shift some of the blue light emitted by said semiconductor body into a yellow spectral range, whereby the semiconductor component emits white light.
19. (Original) The light-emitting semiconductor component according to claim 13, wherein said semiconductor body is a blue light emitting semiconductor body, and said luminous substance pigments shift some of the blue light emitted by said semiconductor body into a green and red spectral range, whereby the semiconductor component emits white light.
20. (Original) The light-emitting semiconductor component according to claim 13, wherein said pigment are formed of a material from a phosphorus group having the general formula  $A_3B_5X_{12}:M$ , where A is at least one element selected from the group consisting of Y, Gd, Lu, Sc, and La; B is at least one element selected from the group consisting of Al and Ga; X is O: M is at least one element selected from the group consisting of Ce, Eu, Cr, Nd, Er, and Tb.
21. (Original) The light-emitting semiconductor component according to claim 13, wherein the mean grain diameter  $d_{50}$  of said luminous substance pigments is between one and two micrometers.

22. (Original) The light-emitting semiconductor component according to claim 13, which comprises light-scattering particles added to said casting resin.
23. (Original) The light-emitting semiconductor component according to claim 13, wherein said luminous substance pigment powder is a tempered pigment powder.
24. (New) A wavelength-converting casting composition, for converting a wavelength of ultraviolet, blue or green light emitted by an electroluminescent component, comprising:
  - a transparent casting resin;
  - an inorganic luminous substance pigment powder dispersed in said transparent resin, said pigment powder comprising luminous substance pigments from Ce-doped phosphors; and
  - said luminous substance pigments having grain sizes  $\leq 20 \mu\text{m}$  and a mean grain diameter  $d_{50} \leq 5 \mu\text{m}$ .
25. (New) The casting composition according to claim 24, wherein said luminous substance pigments are substantially spherical particles.
26. (New) The casting composition according to claim 24, wherein said luminous substance pigments are flakelike particles.
27. (New) The casting composition according to claim 24, wherein the mean grain diameter  $d_{50}$  of said luminous substance pigments is between one and two micrometers.
28. (New) The casting composition according to claim 24, which comprises the following components:
  - a) epoxy casting resin  $\geq 60 \%$  by weight;
  - b) luminous substance pigments  $> 0$  and  $\leq 25 \%$  by weight;

- c) thixotropic agent > 0 and  $\leq 10$  % by weight;
- d) mineral diffusor > 0 and  $\leq 10$  % by weight;
- e) processing adjuvant > 0 and  $\leq 3$  % by weight;
- f) hydrophobic agent > 0 and  $\leq 3$  % by weight; and
- g) adhesion promoters > 0 and  $\leq 2$  % by weight.

29. (New) The casting composition according to claim 24, wherein said Ce-doped phosphors are garnets.
30. (New) The casting composition according to claim 24, wherein said Ce-doped phosphors are YAG: Ce based particles.
31. (New) The casting composition according to claim 24, which comprises a content of iron  $\leq 20$  ppm.
32. (New) The casting composition according to claim 24, wherein said luminous substance pigments are formed with a silicone coating.
33. (New) A light-emitting semiconductor component, comprising:
  - a semiconductor body formed of a semiconductor layer sequence and being capable, during an operation of the semiconductor component, of emitting electromagnetic radiation in at least one of an ultraviolet, blue, and green spectral range;
  - a wavelength-converting casting composition disposed in a vicinity of said semiconductor body, said casting composition being formed of a transparent casting resin and an inorganic luminous substance pigment powder dispersed in said transparent resin, said pigment powder comprising luminous substance pigments from Ce-doped phosphors and having grain sizes  $\leq 20$   $\mu\text{m}$  and a mean grain diameter  $d_{50} \leq 5$   $\mu\text{m}$ ;

said luminous substance pigments converting a portion of the radiation originating from the at least one of the ultraviolet, blue and green spectral range into radiation of a higher wavelength, such that the semiconductor component emits mixed radiation including the higher-wavelength radiation and radiation from the at least one of the ultraviolet, blue and green spectral range.

34. (New) The light-emitting semiconductor component according to claim 33, wherein said casting composition encloses at least a part of said semiconductor body.
35. (New) The light-emitting semiconductor component according to claim 33, wherein said semiconductor body is adapted to emit radiation in a blue spectral range having a maximum luminescence intensity at  $\lambda = 430$  nm or at  $\lambda = 450$  nm.
36. (New) The light-emitting semiconductor component according to claim 33, which further comprises an opaque base housing having a recess formed therein, said semiconductor body being disposed in said recess and said recess being at least partially filled with said casting composition.
37. (New) The light-emitting semiconductor component according to claim 33, wherein said pigment powder comprises at least two luminous substance pigments, where at least one is selected from the luminous substance group of claim 33.
38. (New) The light-emitting semiconductor component according to claim 33, wherein said semiconductor body is a blue light emitting semiconductor body, and said Ce-doped phosphor comprises types of garnet adapted to shift some of the blue light emitted by said semiconductor body into a yellow spectral range, whereby the semiconductor component emits white light.
39. (New) The light-emitting semiconductor component according to claim 33, wherein said semiconductor body is a blue light emitting semiconductor body, and said Ce-doped

phosphor shifts into some of the blue light emitted by said semiconductor body a green and red spectral range, whereby the semiconductor component emits white light.

40. (New) A wavelength-converting casting composition, for converting a wavelength of ultraviolet, blue or green light emitted by an electroluminescent component, comprising:  
a transparent casting resin;

an inorganic luminous substance pigment powder dispersed in said transparent resin, said pigment powder comprising luminous substance pigments from phosphors;  
and

said luminous substance pigments having grain sizes  $\leq 20 \mu\text{m}$  and a mean grain diameter  $d_{50} \leq 5 \mu\text{m}$ .

41. (New) A light-emitting semiconductor component, comprising:

a semiconductor body formed of a semiconductor layer sequence and being capable, during an operation of the semiconductor component, of emitting electromagnetic radiation in at least one of an ultraviolet, blue, and green spectral range;

a wavelength-converting casting composition disposed in a vicinity of said semiconductor body, said casting composition being formed of a transparent casting resin and an inorganic luminous substance pigment powder dispersed in said transparent resin, said pigment powder comprising first luminous substance pigments from phosphors and having grain sizes  $\leq 20 \mu\text{m}$  and a mean grain diameter  $d_{50} \leq 5 \mu\text{m}$ ;

said luminous substance pigments converting a portion of the radiation originating from the at least one of the ultraviolet, blue and green spectral range into radiation of a higher wavelength, such that the semiconductor component emits mixed radiation including the higher-wavelength radiation and radiation from the at least one of the ultraviolet, blue and green spectral range.